

CLAIMS

- 1) Seed of maize inbred line designated NP2391 representative seed of said maize inbred line having been deposited under ATCC Accession No. PTA-5710.
- 5 2) A maize plant, or a part thereof, produced by growing the seed of claim 1.
- 3) Pollen of the plant of claim 2.
- 10 4) An ovule of the plant of claim 2.
- 5) A maize plant, or parts thereof, having all the physiological and morphological characteristics of the plant according to claim 2.
- 15 6) A maize plant or part thereof produced from the maize plant according to claim 2 or 5, by transformation with a transgene that confers upon said maize plant or part thereof tolerance to a herbicide.
- 20 7) A maize plant according to claim 6, wherein said herbicide is glyphosate, gluphosinate, a sulfonylurea herbicide, an imidazolinone herbicide, a hydroxyphenylpyruvate dioxygenase inhibitor or a protoporphyrinogen oxidase inhibitor.
- 25 8) A maize plant or a part thereof produced from the maize plant according to claim 2 or 5, by transformation with an expression vector comprising a transgene that confers upon said maize plant or a part thereof insect resistance, disease resistance or virus resistance.
- 30 9) The maize plant according to claim 8, wherein said transgene conferring is a *Bacillus thuringiensis* Cry1Ab gene.

- 10) The maize plant according to claim 8, wherein said transgene is a VIP3 gene.
- 11) The maize plant according to claim 9, wherein said expression vector further comprises a *bar* gene.
- 5 12) Seed produced by selfing the plant according to claim 2 or 5, wherein said seed produce plants having all the physiological and morphological characteristics of inbred line NP2391, seed of said inbred line having been deposited under ATCC Accession No. PTA-5710.
- 10 13) A tissue culture of regenerable cells of the maize plant according to claim 2.
- 14) The tissue culture according to claim 12, wherein the regenerable cells are from a tissue selected from the group consisting of embryo, meristem, pollen, leaf, anther,
15 root, root tip, silk, flower, kernel, ear, cob, husk and stalk, or are protoplasts or callus produced therefrom.
- 15) A maize plant regenerated from the tissue culture of claim 12, having the morphological and physiological characteristics of inbred line NP2391, seed of said
20 inbred line having been deposited under ATCC Accession No: PTA-5710.
- 16) A method for producing maize seed comprising crossing a first parent maize plant with a second parent maize plant and harvesting the resultant maize seed, wherein said first or second parent maize plant is the inbred maize plant of claim 2 or 5.
- 25 17) The method according to claim 15, wherein said first parent maize plant is different from said second parent maize plant, wherein said resultant seed is a hybrid maize seed.
- 30 18) The method according to claim 15, wherein the inbred maize plant is the female parent.

19) The method according to claim 15, wherein the inbred maize plant is the male parent.

20) A method of introducing a desired trait into maize inbred line NP2391 comprising:

- 5 a) crossing NP2391 plant grown from seed deposited under ATCC Accession No. PTA-5710, with plants of another maize line that comprise a desired trait to produced F1 progeny plants, wherein the desired trait is selected from male sterility, herbicide resistance, insect resistance, and resistance to bacterial, fungal or viral disease;
- 10 b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
- c) crossing the selected progeny plants with NP2391 plants to produce backcross progeny plants;
- d) selecting for backcross progeny plants that have the desired trait and
15 physiological and morphological characteristics of maize inbred line NP2391 to produce selected backcross progeny plants; and
- e) repeating steps c) and d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise the desired trait and all of
20 the physiological and morphological characteristics of maize inbred line NP2391 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

21) A plant produced by the method of claim 19, wherein the plant has the desired trait
and all the physiological and morphological characteristics of corn inbred line
25 NP2391 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.